

STANDARDS UPDATE

[Standards are serious business](#), but this newsletter isn't.

Topics this month:

- **Dan Tepley becomes CoE Office Director**
- **Training & Qualification**
- **LANL Standards Issued in Nov**
- **Engineering Processes News**
- **DOE Technical Standards Action**
- **National Standards Action**
- **When Good Conduct of Engineering Isn't Followed**

The LANL Engineering Standards: <http://engstandards.lanl.gov/>

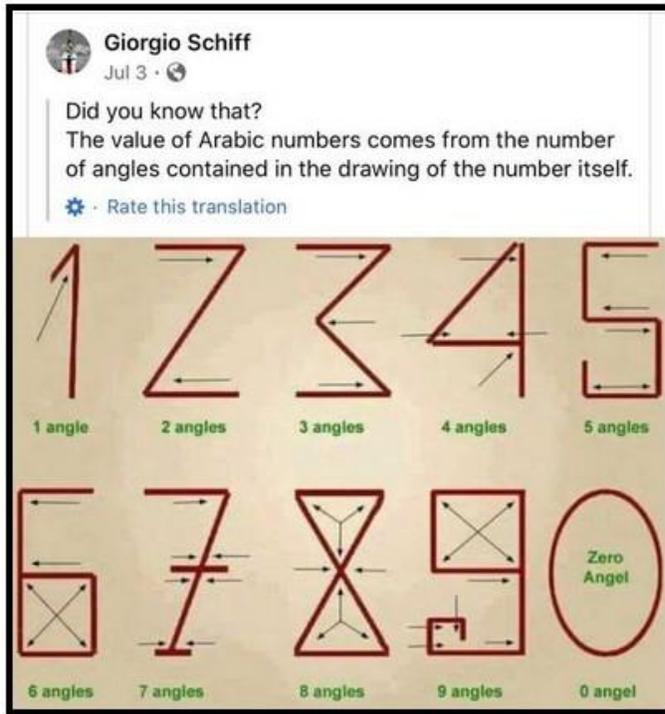
Like yesterday's O2 monitor training message, this newsletter is going to a significant percentage of the Lab—but as BCCs so they can't stupidly reply to the distribution list. Just sayin.'

Note: This newsletter has hyperlinks all over but the blue/underlined formatting may not show. Hover your cursor where you might expect one.

DAN TEPLEY BECOMES COE OFFICE DIRECTOR

On November 16, Dan took over from Jason Apperson as permanent CoE Office Director and ES-FE group manager. He has experience in engineering, QA, and program management and is quickly getting up to speed and involved, and we welcome him!

Fun fact:



TRAINING & QUALIFICATION

Commercial Grade Dedication Preparers Curriculum 5925 has been updated to include Course 51122, COE Commercial Grade Dedication (CGD) Requalification Slides and Quiz. If you need to requalify as a CGD Preparer please log into UTrain and complete this task. If you have expired in your Qualification, you will need to be authorized in WQAS by your manager upon successful completion of #51122. It is recommended that all individuals assigned 5925 check their To Do list in UTrain to verify their specific training needs. If you have any questions please contact your Training Specialist for assistance. (Thanks to Stan Hayes and Yolanda Trujillo)

...and a reminder: [free LinkedIn Learning subscriptions for all](#). See how you can sign up for individualized, self-paced and online professional development program with thousands of relevant courses delivered by industry experts.

A few Updates ago it was a Hilti exoskeleton. World domination can't be far away.



Robot finds its way to drill overhead holes

A new robot from Hilti uses building information modeling to accurately drill overhead holes and mark them on construction sites. The Jaibot is semi-autonomous and is designed to spare human workers the strain of repetitive overhead installation tasks.

LANL STANDARDS ISSUED IN NOV
Engineering Standards Manual ESM [STD-342-100](#)

ESM-Chapter	Section	Title	Rev.	Date
Ch 14 Sustainable Design	References	New "LANL HPSB Guide." Thanks to Dee Bangert in UI Sustainable Program.	-	11/10/2020
Ch 17 - Pressure Safety	NASME	Reference: When listed components cannot be used, reputable manufacturers as discussed in NASME-1-a, b, etc. (xls) (LANL only). Thanks to POC Ari Swartz.	-	11/30/2020

Master Specs [STD-342-200](#)

Spec Number	Rev.	Spec Title	Effective	Summary of latest Revision
These are repeats from last month's Update. Thanks to Fire Chapter POC Keenan Dotson, Tadz Kostrubala, others for the these revisions (Todd Smith leading fire spec maintenance from here out):				
07 8400	6	Firestopping	11/3/20	Aligned definitions with those in the IBC and clarified QA and QC expectations in comment to the authors. Broadened scope to include smoke barriers and fire-resistant joints. Removed unnecessary information (weren't requirements).
10 4400	2	Fire Protection Specialties	11/3/20	Added Amerex as preferred extinguisher. Added provisions for exterior installations of fire extinguishers, either in cabinets or with covers.
21 1313	10	Wet-Pipe Sprinkler Systems	11/3/20	Revised to provide consistency with other 21 13XX specifications and LANL expectations for welding and storage of material. Provided options for design performance requirements, and clarified designer qualifications and expectations for a PE stamp. Added additional flexibility for air vent type and installation.
21 1316	8	Dry-Pipe Sprinkler Systems	11/3/20	Revised to provide consistency with other 21 13XX specifications, and clarified LANL expectations for welding and storage of material. Provided options for design performance requirements, and clarified designer qualifications and expectations for a PE stamp. Added additional flexibility for means of forward-flow test.

21 1319	8	Preaction Sprinkler Systems	11/3/20	Revised to provide consistency with other 21 13XX specifications, and clarified LANL expectations for welding and storage of material. Provided options for design performance requirements, and clarified designer qualifications and expectations for a PE stamp. Added additional flexibility for means of forward-flow test. Referenced 28 4600 for detectors and controls.
21 1326	8	Deluge Fire-Suppression Sprinkler Systems	11/3/20	Revised to provide consistency with other 21 13XX specifications, and clarified LANL expectations for welding and storage of material. Provided options for design performance requirements, and clarified designer qualifications and expectations for a PE stamp. Added additional flexibility for means of forward-flow test. Referenced 28 4600 for detectors and controls.
21 2200	6	Clean Agent Fire-Extinguishing Systems	11/3/20	Changed manual release stations and notification appliance requirements to different from fire alarm devices. Added requirements for separated pre-discharge and discharge alarms. Added pipe hanging requirements. Referenced 28 4600 for detectors and controls.

CAD Standards Manual [STD-342-300](#) POC Scott Richardson

Section	Section/Title	Rev.	Date	Summary of Revision
200	CAD Requirements	5 chg1	11/19/20	Updated Section 214 3.0.D regarding required AutoCAD version from “2014 or newer” to “2021 or newer.”
200	CAD Requirements	-	11/16/20	Digital Signature Title Block and Sheet Template updates.



Too soon? Or too late...?

ENGINEERING PROCESSES NEWS

Per CoE Eng Processes Manager is Sarah Murdock, 667-7788, sterrill@lanl.gov:

AP News

The following Administrative Procedures have been revised and posted to the COE Administrative Procedures [SharePoint site](#). Always ensure you are working to the latest version of all Engineering Administrative Procedures adopted at your location.

AP-341-521, Identification and Control of Critical Spare Parts, R1	11/12/2020	Issued VAR-10250 r1, Critical Spare Parts List (CSPL) use of Spreadsheet in Lieu of AP 341-521 Form 01, to allow use of Critical Spare Parts Alternative Form on a sitewide basis.
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If you have been identified as requiring additional training on an AP you will see an assignment on your UTrain "to do" list.

Other updates

- AP-341-405 Identification and Control of Technical Baseline in Operating Facilities, Revision 5 is ready for second review and will hopefully be ready for approval by end of 2020.
- AP-341-705 Make or Buy Determination for Design Engineering, Revision 0 has been approved and will be effective 12/4/2020. You can find that AP on the AP SharePoint site.
- AP-341-720 Engineering Construction Submittals, Revision 0 is currently in review cycle. This AP was previously under Project Management but was transferred to Engineering Services. Goal is to have the AP ready for approval within the next 2 weeks.

- The following APs are up for revision within the next several months. Please submit any comments or requests for changes through the COE Engineering Procedures SharePoint site.
 - AP-341-404 Master Equipment List
 - AP-341-616 Technical Baseline Change During Design
 - AP-341-503 Technical Evaluation of Replacement Items
 - AP-341-801 Post Modification/Post Maintenance Testing

Please enter issues with APs in the SharePoint issues database. Use the live button below, same one that's found in the upper right of the Processes SharePoint [homepage](#).



A webpage of the AP pdfs can be reached from LANL Internal with any browser/machine combo (also, you can easily get to int.lanl.gov from mymail.lanl.gov). Once in, you can navigate from the top of the [CoE home page](#) or directly [here](#). On the other hand, if you need the AP Word forms, open a terminal session and use IE for SharePoint for best results. When all else fails, email Christina Salazar-Barnes.

DOE TECHNICAL STANDARDS ACTION

[Tech Stds Program](#) [postings](#) in the past month: None.

NATIONAL STANDARDS ACTION

LANL's [IHS Eng Workbench](#) online codes & standards subscription news:

Document number: [IEEE C57.12.01](#)

Publication Date: 9/24/2020

Title: General Requirements for Dry-Type Distribution and Power Transformers

Type of Change: Complete Revision

For the following NFPA: ESM Ch 1 Z10 and DOE-STD-1066 discuss which version of NFPA standards to use, but this is likely formally changing soon to a blended approach where newer (but not necessarily latest) editions are expected. Stay tuned. Also, NFPA, like some others, has instituted digital rights management (DRM) software. Per library's FAQ: This requires a free Adobe Acrobat plug-in that "locks" the PDF file to the computer on which it was first opened. With admin rights on your computer, [Click here to download the plug-in](#). Once FileOpen is working, you can view, print or download the file.

Document number: [NFPA 1](#)

Publication Date: 2021

Title: Fire Code

Type of Change: Complete Revision

Document number: [NFPA 30](#)
Publication Date: 2021
Title: Flammable and Combustible Liquids Code
Type of Change: Complete Revision

Document number: [NFPA 101](#)
Publication Date: 2021
Title: Life Safety Code
Type of Change: Complete Revision

WHEN GOOD CONDUCT OF ENGINEERING ISN'T FOLLOWED

Good CoE includes good ethics; it's even part of New Mexico's professional engineer licensure processes—there's a requirement that PEs take continuing education in ethics. Some of you are likely scrambling to do so before Jan 1.

Microsoft Engineer Gets 9 Years For Stealing \$10M From Company

The defendant failed to hide his \$10 million theft from Microsoft by using bitcoin.

<https://interestingengineering.com/microsoft-engineer-gets-9-years-for-stealing-10m-from-company>



A former [Microsoft](#) software engineer from Ukraine was sentenced to nine years in prison after stealing more than \$10 million in store credit from Microsoft's online store.

The man, Volodymyr Kvashuk, took advantage of an oversight when tasked with testing Microsoft's online retail sales platform. Though the sales software automatically prevented testers like Kvashuk from shipping physical products, it didn't block the purchase of store credit...

LAST MONTH'S UPDATE TOPICS

Miss an issue? The archive is at "Monthly Update" on the Standards homepage. Last month's topics:

- **Training & Qualification -- TOMORROW**
- **LANL Standards Issued in Oct or so**
- **Engineering Processes News**
- **DOE Technical Standards Action**
- **National Standards Action**
- **O&M Criteria Changes**
- **When Good Conduct of Engineering Isn't Followed**

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